

# Notice of Allowability

Application No.

09/871,268

Examiner

Xu Mei

Applicant(s)

VINCENT LAM, MAN TAI

Art Unit

2615

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to interview dated 11/19/2007.
2. ☒ The allowed claim(s) is/are 1, 2, 4, 7, 9-10, 12-15, 17, 19-20, 32, 34, 36, 37.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 20071119.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

### DETAILED ACTION

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.

2. Authorization for this Examiner's Amendment was given in a telephone interview with Mr. Daniel Brown on 11/19/2007.

3. In the Claims:

**Claims 1, 2 and 7** have been amended as follow:

**Claim 1 (currently amended)** A method for transmitting two related channels of signals through the air, the method comprising:

modulating a first channel of signals with a first carrier frequency;

amplifying the first carrier frequency modulated with the first channel of signals;

modulating a second channel of signals with a second carrier frequency;

amplifying the second carrier frequency modulated with the second channel of signals;

combining the amplified and modulated first channel of signals and the second channel of signals through a high isolation combiner, which provides a high degree of isolation therebetween;

Art Unit: 2615

coupling the combined signals from the high isolation combiner directly to a single antenna output;

transmitting the combined signals to a receiver system; and

regenerating the first channel and the second channel of signals in the receiver system by separating one from the other.

**Claim 2 (currently amended)** A dual carrier wireless transmitter apparatus, comprising:

a first voltage controlled oscillator, having a first base band signal coupled to deviate a first oscillator frequency, thereby outputting a first modulated carrier signal;

a second voltage controlled oscillator, having a second base band signal coupled to deviate a second oscillator frequency, thereby outputting a second modulated carrier signal;

a high isolation combiner coupled to combine said first modulated carrier signal and said second modulated carrier signal directly to a single antenna output, and operable to provide a high degree of isolation therebetween;

a first amplifier coupled to amplify said first modulated carrier signal before input to said high isolation combiner, and

a second amplifier coupled to amplify said second modulated carrier signal before input to said high isolation combiner.

**Claim 7 (currently amended)** A dual carrier wireless transmitter apparatus,

Art Unit: 2615

comprising:

a first voltage controlled oscillator, having a first base band signal coupled to deviate a first oscillator frequency, thereby outputting a first modulated carrier signal, wherein said first base band signal deviates said first oscillator frequency by about 150 kilohertz;

a second voltage controlled oscillator, having a second base band signal coupled to deviate a second oscillator frequency, thereby outputting a second modulated carrier signal, and

a high isolation combiner coupled to combine said first modulated carrier signal and said second modulated carrier signal to directly a single antenna output, and operable to provide a high degree of isolation therebetween.

4. The following is an Examiner's Statement of Reasons for Allowance:

Discussion during the interview of 11/19/2007 resulted in amendment of claims 1, 2 and 7 as stated above to overcome the cited prior art of Kintis et al (US-6535720). The amendment to claims 1, 2 and 7 now including amended limitations regarding the high isolation combiner and direct connection of the modulated carrier signals to a single antenna output, which overcome the Kintis et al reference because Kintis et al fails to disclose or suggest such limitations. Updated search was conducted, but no additional prior art reference was found that is suitable for use in the instant application. Applicant's invention that comprises a particular combination of elements and functional steps is therefore deemed allowable.

Art Unit: 2615

5. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on maxi flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Xu Mei/  
Xu Mei  
Primary Examiner  
Art Unit 2615  
11/19/2007